



Toward Zero Deaths

Framework for Five-Year Action Plan

“Toward Zero Deaths” is the ultimate goal for state transportation officials, and it is spelled out in the new Strategic Highway Safety Plan (SHSP) adopted in September by several state agencies and departments, including Caltrans. The 70-page plan is a statewide, coordinated framework for reducing fatalities and severe injuries on all public roads. Implementation of the plan begins in the spring of 2016.

The plan is data driven, performance measured and focused on the 4Es of safety — engineering, enforcement, education and emergency medical services. It complements the Highway Safety Improvement Program, the Highway Safety Plan, the Commercial Vehicle Safety Plan and the 2040 California Transportation Plan, which is scheduled to be released this month.

Photo above: California State Transportation Agency Secretary Brian Kelly, right, signs off on the new Strategic Highway Safety Plan.

California developed its first SHSP in 2005, amended it in 2010 and — following federal mandates to update the plan every five years — updated it again this year. More than 50 agencies and organizations, including tribal governments and regional transportation organizations, contributed to the current version.

Key Goals in the 2015 SHSP

- Increase the focus on reducing the number of severe injuries and the rate at which severe injuries occur in each 100 million miles traveled.
- Measure the cost effectiveness of improvements.
- Develop strategies and actions to address the more difficult problems (repeat DUI offenders, breath-test refusals, drug-impaired driving).
- Identify the locations of fatalities and severe injuries.
- Identify areas with high-risk factors for potential crashes
- Include tribal roads.
- Involve even more safety stakeholders from across the state.
- Involve the public to create a culture of traffic safety.
- Coordinate with other safety statewide plans, including California Transportation Plan, California Freight Plan and Highway Safety Plan.
- Improve the speed of data gathering.

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Caltrans' SHSP Accomplishments

The Strategic Highway Safety Plan has achieved much since the 2010 plan was released. Below are some accomplishments as they relate to Caltrans:

Roadway Departure

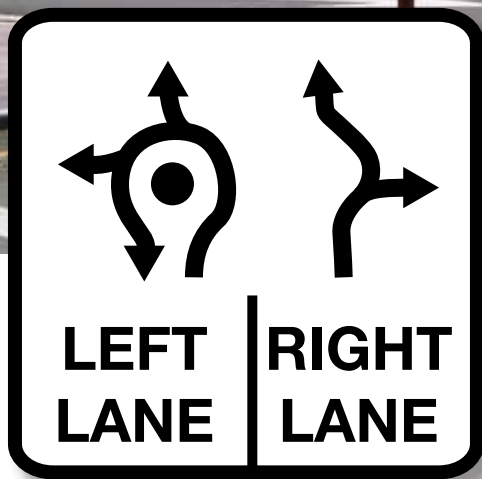
- Implemented the Caltrans Local Roadway Safety Manual and Highway Safety Improvement Program (HSIP) Project Evaluation Tool, which resulted in data-driven project evaluations, and developed the Traffic Injury Mapping System, which made local crash data available to all jurisdictions.
- Conducted training and outreach on low-cost safety improvements including the use of high-friction surface treatments and road safety audits. Local jurisdictions are now incorporating these improvements as part of their HSIP funded activities.
- Local agencies shifted to lower cost/higher benefit improvements which resulted in over 20 miles of HSIP funded projects per \$1 million invested.

Intersections, Interchanges, and Other Roadway Access

- Developed a policy that requires the consideration of roundabouts and safety performance analysis findings when adding or expanding access points on the State Highway System. The same also applies to local agencies.
- Produced an engineering policy to identify and address safety performance needs and impacts in the project scope for investments in freeway corridors where severe crashes are concentrated.
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- Created the Freeway Safety Performance Demonstration.
- Developed a program which evaluates the use of lighting as a countermeasure along freeway corridors experiencing the highest concentration of fatal collisions on the state highway system.

Work Zones

- Developed first-in-nation traffic control policies to accommodate bicyclists in work zones.
- Evaluated and promoted work zone best practices, including use of full roadway closures, larger letters on temporary signs, and temporary transverse rumble strips for flagging operations.
- Increased work zone awareness to influence driver behavior through changes to DMV handbook and tests, project-specific websites, real-time traffic updates, and work zone safety campaigns.
- Developed and conducted a joint work zone training between Caltrans, contractors, and the California Highway Patrol.



Roundabouts Keep Traffic Moving, Safe

In many parts of the world, roundabouts are a routine sight. In many parts of California, however, they are still a novelty – a situation likely to change in the coming years.

Roundabouts have shown potential to address some very sobering statistics and some very specific traffic challenges.

In California in 2012, nearly half (45.7 percent) of fatalities and severe injuries were related to crossing and left turn movements at intersections and the merging, weaving and lane changing movements generated by freeway, expressway and carpool lane entrances and exits. The primary collision factors, according to the recently updated Strategic Highway Safety Plan (SHSP), included: improper passing, unsafe lane changing, improper turning or other improper driving. Between 2003 and 2012, 15,917 people died and 56,134 were severely injured at intersections and between closely spaced freeway interchanges and other access points.

Enter the roundabout, in which vehicles travel around a central island in a counterclockwise direction. Studies show that roundabouts can have many advantages over traffic signals when constructed in the right location.

For example, roundabouts provide traffic calming, resulting in reduced speeds. They require less maintenance, have lower yearly operational costs and have a longer service life. They reduce greenhouse gas emissions by reducing vehicle idling time. The median islands also provide refuge for pedestrians, allowing them to cross one direction of traffic at a time. And they provide additional opportunities for landscaping in the community.

Tips For Motorists Navigating Roundabouts

For the uninitiated, roundabouts can seem a bit confusing at first. They're actually quite simple: vehicles entering or exiting the roundabout must yield to vehicles, bicyclists and pedestrians. Here are some other rules, taken from the Department of Motor Vehicles' California Driver Handbook. When you approach a roundabout:

- Slow down as you approach the intersection.
- Yield to pedestrians and bicyclists crossing the roadway.
- Watch for signs and pavement markings that guide you or prohibit certain movements.
- Enter the roundabout when there is a big enough gap in traffic.
- Drive in a counterclockwise direction. Do not stop or pass other vehicles.
- Use your turn signals when you change lanes or exit the roundabout.
- If you miss your exit, continue around until you return to your exit.

For roundabouts with multiple lanes, choose your entry or exit lane based on your destination. For example, to

- Turn right at the intersection, choose the right-hand lane and exit in the right-hand lane.
- Go straight through the intersection, choose either lane, and exit in the lane you entered.
- Turn left, choose the left lane and exit.

*Source: Division of Traffic Operations
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